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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,447	01/22/2002	James R. Keogh	P-9170.00	5485

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MEDTRONIC, INC.
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EXAMINER

MICHENER, JENNIFER KOLB

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/054,447	Applicant(s) KEOGH ET AL.	
	Examiner Jennifer K. Michener	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-236 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-236 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, drawn to a method of coating a medical device having a catechol moiety with a hydrophilic polymer having a hydroxyl, phosphate, sulfate, carboxylate, amide, guanidino, or amine moiety, classified in class 427, subclass 2.1.
 - II. Claims 11-25, drawn to a method of coating a medical device having a quinone moiety with a hydrophilic polymer having an amine, sulfhydryl or hydroxyl moiety, classified in class 427, subclass 2.24.
 - III. Claims 26-41, drawn to a method of coating a medical device having a quinone moiety with a hydrophilic polymer having a guanidino moiety, classified in class 427, subclass 2.25.
 - IV. Claims 42-51, drawn to a method of coating a medical device having a semiquinone moiety with a hydrophilic polymer having moiety capable of forming a bond with a semiquinone moiety, classified in class 427, subclass 2.3.
 - V. Claims 52-61, drawn to method of coating a medical device having hydroxyl, phosphate, sulfate, carboxylate, amide, guanidino, or amine moiety with a hydrophilic polymer having a catechol moiety, classified in class 427, subclass 2.1.

- VI. Claims 62-76, drawn to a method of coating a medical device having an amine, sulfhydryl or hydroxyl moiety with a hydrophilic polymer having a quinone moiety, classified in class 427, subclass 2.24.
- VII. Claims 77-92, drawn to a method of coating a medical device having a guanidino moiety with a hydrophilic polymer having a quinone moiety, classified in class 427, subclass 2.25.
- VIII. Claims 93-102, drawn to a method of coating a medical device having a moiety capable of forming a bond with a semiquinone moiety with a hydrophilic polymer having a semiquinone moiety, classified in class 427, subclass 2.3.
- IX. Claims 103-114, drawn to a method of coating a biomolecule with a hydroxyl, phosphate, sulfate, carboxylate, amide, guanidino, or amine moiety on a medical device having a hydrophilic polymer with a catechol moiety disposed thereon, classified in class 427, subclass 2.1.
- X. Claims 115-131, drawn to a method of coating a biomolecule with amine, sulfhydryl or hydroxyl moiety on a medical device having a hydrophilic polymer with a quinone moiety disposed thereon, classified in class 427, subclass 2.24.
- XI. Claims 132-149, drawn to a method of coating a biomolecule with a guanidino moiety on a medical device having a hydrophilic polymer with a quinone moiety disposed thereon, classified in class 427, subclass 2.25.

- XII. Claims 150-161, drawn to a method of coating a biomolecule with a moiety capable of forming a bond with a semiquinone moiety on a medical device having a hydrophilic polymer with a semiquinone moiety disposed thereon, classified in class 427, subclass 2.3.
- XIII. Claims 162-173, drawn to a method of coating a biomolecule with a catechol moiety on a medical device having a hydrophilic polymer with a hydroxyl, phosphate, sulfate, carboxylate, amide, guanidino, or amine moiety disposed thereon, classified in class 427, subclass 2.1.
- XIV. Claims 174-190, drawn to a method of coating a biomolecule with a quinone moiety on a medical device having a hydrophilic polymer with an amine, sulfhydryl or hydroxyl moiety disposed thereon, classified in class 427, subclass 2.24.
- XV. Claims 191-208, drawn to a method of coating a biomolecule with a quinone moiety on a medical device having a hydrophilic polymer with a guanidino moiety disposed thereon, classified in class 427, subclass 2.25.
- XVI. Claims 209-220, drawn to a method of coating a biomolecule with a semiquinone moiety on a medical device having a hydrophilic polymer with a moiety capable of bonding with a semi-quinone moiety disposed thereon, classified in class 427, subclass 2.3.
- XVII. Claims 221-232, drawn to a method of coating a catechol hydrophilic polymer onto a surface with metal thereon, classified in class 427, subclass 399.

XVIII. Claims 233-234, drawn to a medical device coated with hydrophilic polymer attached via catechol moiety, classified in class 623, subclass 1.

XIX. Claims 235-236, drawn to a medical device coated with a hydrophilic polymer and then a biomolecule, classified in class 604, subclass 1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I-XVII are all unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed as capable of use together and they have different functions and effects. Groups I-IV all use different linking moieties than each other. Groups V-VIII use the linking groups of Groups I-IV, however the substrates and the hydrophilic agents of these latter Groups use the inverse moieties of the corresponding claims in the former Group, i.e., entirely different chemicals are used. Groups IX-XVI are directed to inventions unrelated to those of I-VIII because Groups IX-XVI coats a substrate that already contains a hydrophilic polymer with a biomolecule. Group XVII is unrelated to all others due to the use of the metal-coated surface.
3. Inventions I-XVII and XVIII-XIX are related as processes of making and products made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the products can be made by another

and materially different process such as laminating the coatings without the substrate surface having any previous moieties thereon.

4. Inventions XVII and XIX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed as capable of use together and have different functions and effects. The product of XIX has the biomolecule with the moiety thereon.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
6. Because these inventions are distinct for the reasons given above and the search required for each of the Groups is not required for the other Groups, restriction for examination purposes as indicated is proper.
7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
8. No telephone call was made to request an oral election to the above restriction requirement due to the complexity of the case.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Art Unit: 1762

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer K. Michener whose telephone number is (571) 272-1424. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Kolb Michener
AU 1762
Patent Examiner
8/10/04